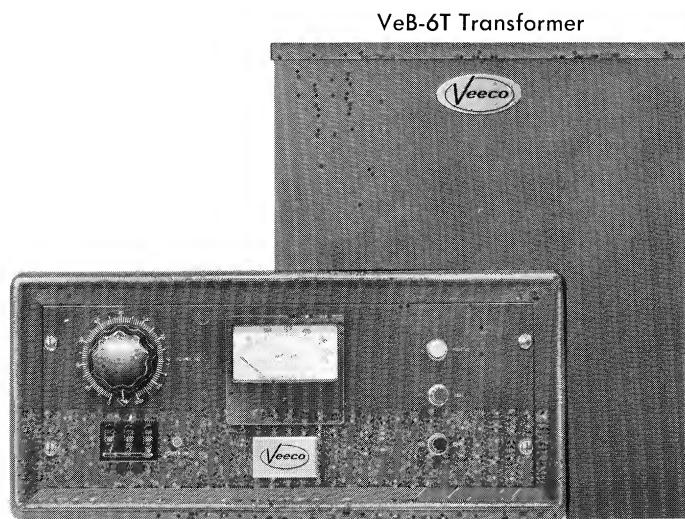


FEATURES

- 99.5% efficiency (eff = actual beam current/emission current)
- Self-accelerated
- High deposition rate (3000 A/sec for iron @ 4" from source)
- Electrostatically focused...magnet not required
- Bakeable at 400°C
- Constant depth of focus...1/8" dia. spot anywhere in 2" range
- Focusing insensitive to accelerating voltage and beam current
- Non-regulated power supply thereby suitable for pulsing
- Beam power varied with only one control
- Constant spot while beam power varied
- Electrostatic deflection available
- Gun power output read directly on wattmeter (reads actual beam power)
- Safety interlocks
- Bifilar tungsten filament
- 500 hour filament life (minimum)
- Filament is self-aligning and may be easily changed in few seconds
- No water cooling required
- Small size (2 1/4" dia. x 3" L and 1/2 lb.)
- Only one power feed-thru required
- Power supply control may be rack mounted
- Gun position variable within vacuum chamber
- Most economical system on a dollars per kilowatt basis
- Uniform beam density



Power Supply and Control VeB-6C

Ve-BEAM ELECTRON GUN POWER SUPPLY

Models VeB-6C and VeB-6T

To provide the power required for the high evaporation rates attained with the Model VeB-6 Electron Beam Gun, Veeco has engineered the PVeB-6 Power Supply with these features:

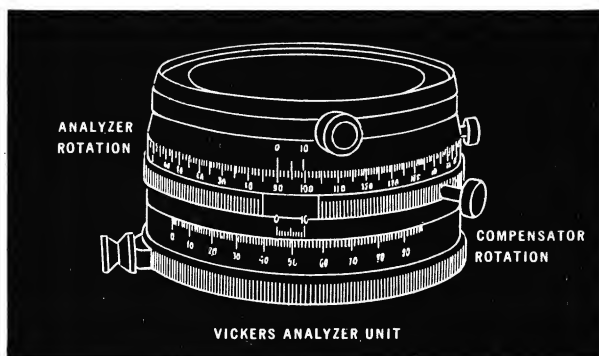
- 6 KW output
- 11, 15 or 20 KV at taps
- 0-300 ma. output max., continuously variable
- Beam Power read directly from watt meter
- Automatic preheat of filament
- Interlocks to prevent accidental application of high voltage
- Provision for process interlock or control

VICKERS *Excellence...* in Polarizing Microscopes

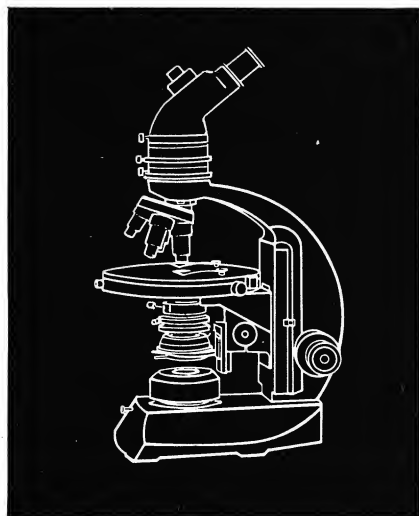
gives you significant new performance advantages in chemical, mineralogical or petrographic studies. Here are a few particular examples:

ANALYSIS OF POLARIZED LIGHT — no other polarizing microscope gives you facilities as complete as those designed into the Vickers for the quantitative analysis of polarized light. The swing-out polarizer is graduated and rotatable through 360°. The analyzer unit is rotatable through 180°.

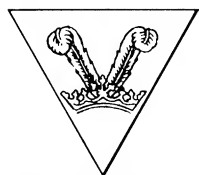
Compensators may be rotated through 90° and provision is made for rotation either independently or linked with analyzer rotation to a precision of 0.1°. With this facility you can, for example rotate a simple mica compensator below the



analyzer, eliminating the necessity for an expensive insertable "elliptic compensator". ▼ Compensators and graduated wedges may be inserted and read either in the analyzer unit, or just above the objective back lens (where graduations on a quartz wedge can be read over the interference figure) or, by using the Wright slotted ocular, above the Bertrand Lens. In this position compensators can be used equally well on the specimen image or its interference figure. In a few words, the Vickers design enables the most precise and convenient execution of all analyses, from the simplest to the most sophisticated. ▼ **MICROSCOPE STAGE** — the new ball-bearing stage is built to a new standard of smooth, easy motion, stability and precision operation. This is achieved by a unique manufacturing method involving preparation of the ball-race bearing surfaces by optical lens



working techniques. **FLAT FIELD PERFORMANCE** — the Microplan flat field objectives can be supplied strain-free in magnifications of 10x, 20x and 40x. This is the widest available range of strain-free, specially corrected objectives, giving you wide, absolutely flat fields of view from 50x to 700x. ▼ These examples are only examples — there is so much more which deserves your consideration, — other optical and mechanical design features, the wide range of models for research and routine applications, the unequalled selection of special accessory equipment. Our catalog tells the whole story. May we send it to you?



Member of the Vickers Group

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M I C R O S C O P E S

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Prices - F.O.B. delivered in continental U.S.A.

Routing and method of shipment at option of seller.

Shipment by method prescribed by customer will be charged at cost in full.

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POLARIZING MICROSCOPE

MAY 1966

STANDS

Polarizing microscope for transmitted light, with limb, base, concentric coarse and fine focusing, ball bearing rotating stage, rack and pinion substage, revolving triple objective changer, and simple polarizer

M720004

☐

\$ 488.50

Polarizing microscope for transmitted light as above, but with individual objective changer

M720024

☐

476.00

As M720004 but with graduated polarizer

M720005

☐

530.00

As M720024 but with graduated polarizer

M720025

☐

517.00

Polarizing microscope for incident light, with limb, base, concentric coarse and fine focusing, ball bearing rotating stage, external source incident illuminator, and revolving quadruple objective changer

M730005

☐

517.50

*Extra cost for illuminator M730150 in place of external source incident illuminator

☐

79.50

Polarizing microscope for incident light as above, but with individual objective changer

M730025

☐

512.00

*Extra cost for illuminator M730150 in place of external source incident illuminator

☐

79.50

Polarizing microscope for transmitted and incident light, with base, limb, concentric coarse and fine focusing, ball bearing rotating stage, rack and pinion substage, graduated polarizer, external source incident illuminator, revolving quadruple objective changer

M740005

☐

644.00

*Extra cost for illuminator M730150 in place of external source incident illuminator

☐

79.50

Polarizing microscope for transmitted and incident light as above, but with individual objective changer

M740025

☐

638.50

*Extra cost for illuminator M730150 in place of external source incident illuminator

☐

79.50

VIEWING HEADS

(at least one of the viewing heads must be ordered with each stand)

Straight monocular head with focusing Bertrand lens for normal tube eyepieces

M720410

☐

123.00

*A built-in light incident illuminator, M730150, is offered in lieu of the external source incident illuminator included in the above incident light stands. When this is required the cost of the stand (M730005, M730025, M740005 or M740025) will be increased by ~~244.50~~ 79.50

		Price	Number Required	Total
As M720410, but for wide tube eyepieces	M720411 ☐	\$ 123.00		
Straight monocular head for normal tube eyepieces	M720412 ☐	60.50		
As M720412, but for wide tube eyepieces	M720413 ☐	60.50		
Inclined monocular head for normal tube eyepieces	M720510 ☐	38.00		
Binocular viewing head with normal tubes (one eyepiece tube slotted)	M720270 ☐	171.00		
Inclined monocular head for normal tube eyepieces, with fixed focus Bertrand lens	M720227 ☐	100.00		
As M720227, but for wide tube eyepieces	M720228 ☐	100.00		
Inclined monocular head for normal tube eyepieces with focusing Bertrand lens	M720225 ☐	134.50		
As M720225, but for wide tube eyepieces	M720226 ☐	134.50		
Photovisual inclined monocular head with fixed focus Bertrand lens (wide tube eyepieces are used in both tubes).	M720380 ☐	201.50		

ANALYSER UNITS

One of the analysers must be ordered with each stand

Simple analyser unit with non-rotatable slide out analyser and slot for compensators

M720135 ☐ 75.75

Analyser unit with rotatable slide out analyser and rotatable compensator slot, each with circle and vernier reading to 6 minutes of arc

M720100 ☐ 138.00

COMPENSATORS

Mica $\frac{1}{2}$ wave plate

M720335 ☐ 13.50

Nakamura $\frac{1}{2}$ shadow plate

M720340 ☐ 36.50

Elliptic $\frac{1}{20}$ wave plate

M720345 ☐ 20.75

$\frac{1}{2}$ wave and sensitive tint plate in single mount

M720350 ☐ 40.50

de-Sénarmont plate (5461A)

M720365 ☐ 34.75

Elliptic and Nakamura plate in single mount

M720370 ☐ 62.75

Sensitive tint plate

M720375 ☐ 23.50

Quartz wedge—not graduated, 6 orders

M007585 ☐ 41.50

Quartz wedge—graduated, 6 orders

M007590 ☐ 52.75

Adaptor for any of the above compensators to Dick-Wright ocular

M007572 ☐ 11.75

Wide graduated quartz wedge—6 orders for Dick-Wright ocular

M007571 ☐ 74.00

POLARIZER UNITS

Simple polarizer unit, ungraduated, with swing out polarizer

M720170 ☐ 61.00

Simple polarizer unit, ungraduated, with swing out polarizer and a subsidiary condenser

M720515 ☐ 95.25

Polarizer unit, rotatable, and graduated every 5°, and swing out filter holder

M720190 ☐ 102.50

ILLUMINATION UNITS

One of the substage illumination units must be ordered with each stand for transmitted light

Plano-concave mirror in gimbal for microscope with circular recess in base

M220325 ☐ \$ 20.25

Plano-concave mirror in gimbal for microscope with circular and extended recess in base

M151391 ☐ 18.50

Low voltage illuminator with 6 V., 15 W., bulb for microscope with circular recess in base

M220290 ☐ 48.75

Low voltage illuminator with 6 V., 15 W., bulb for microscope with circular and extended recess in base

M720615 ☐ 50.00

Transformer for 110 V. mains with dimming rheostat for M220290 illuminator

M220501 ☐ 36.00

High intensity bench lamp complete with built-in transformer for 110 V. supply with 6 V., 48 W. bulb

M012804 ☐ 137.75

Spare bulb 6 V., 48 W.

M012801 ☐ 5.25

Spare bulb 6 V., 15 W.

M150521 ☐ 5.25

OBJECTIVES

(All the objectives listed below are strain free)

	Magnification	N.A.		
Achromatic				
	3 ×	0.10	M022013 ☐	18.00
	5 ×	0.15	M022113 ☐	35.25
	10 ×	0.25	M022313 ☐	27.50
	20 ×	0.5	M022413 ☐	50.00
	*20 ×	0.5	M022414 ☐	51.50
	40 ×	0.65	M022513 ☐	43.75
	*40 ×	0.65	M022514 ☐	46.00
	40 ×	0.85	M022913 ☐	60.50
	*40 ×	0.85	M022914 ☐	63.50
	100 × oil	1.30	M022613 ☐	69.00
Microplan				
	10 ×	0.25	M025113 ☐	57.25
	*10 ×	0.25	M025114 ☐	58.25
	20 ×	0.50	M025413 ☐	89.50
	*20 ×	0.50	M025414 ☐	91.50
	40 ×	0.70	M025213 ☐	65.50
	*40 ×	0.70	M025214 ☐	67.75

*—For uncovered objects.

Centring objective mount for single objective changer (where a single objective changer has been ordered on the stand one of these mounts is needed for each objective ordered)

M007716 ☐ 20.75

Price

Number
Required

Total

				Price	Number Required	Total
EYEPIECES						
Huygens with crossline						
5×	Single (normal tube)	M045000	☐	\$ 36.00		
5×	Single (wide tube)	M045005	☐	36.00		
10×	Single (normal tube)	M045300	☐	24.75		
10×	Single (wide tube)	M045305	☐	38.25		
10×	Paired (normal tube)	M045320	☐	51.00		
10×	Single (wide tube with scale)	M045303	☐	52.75		
	Old No.					
Dick-Wright graduated rotating slotted ocular	M007570	M720570	☐	201.65		
Accessories for Dick-Wright ocular:—						
Extra wide quartz wedge, 6 orders	M007571	☐		74.00		
Adaptor to permit use of standard compensators	M007572	☐		11.75		
Adaptor with circular opening to carry grati- cules	M007574	☐		6.75		
(The Dick-Wright graduated rotating slotted ocular can only be fitted to the following heads, M720380, M720410, M720411, M720412 and M720413)						
CONDENSERS						
Centring trip-out condenser with aspheric lens	M720496	☐		61.50		
Abbe condenser in plain mount 1.2 N.A.	M720294	☐		24.75		
Swing out top lens condenser in plain mount	M720290	☐		44.75		
Swing out top lens condenser in centring mount	M720495	☐		59.00		
Aplanatic condenser in plain mount, 1.0 N.A.	M720361	☐		44.25		
Aplanatic condenser in centring mount, 1.0 N.A.	M720362	☐		73.50		
Aplanatic condenser in plain mount for built-in illumina- tor, 1.0 N.A.	M720363	☐		57.75		
Aplanatic condenser in centring mount for built-in illuminator, 1.0 N.A.	M720364	☐		87.50		
Aplanatic condenser in centring mount, 1.3 N.A.	M720475	☐		80.00		
Aplanatic condenser in plain mount, 1.3 N.A.	M720476	☐		52.00		
Achromatic oil immersion condenser in centring mount, 1.3 N.A.	M720359	☐		119.50		
ACCESSORIES						
Attachable mechanical stage for fitting to rotating stage	M720300	☐		163.50		
Three axis universal stage with 5× objective N.A. .15, a pair of hemispheres, all supplied in case	M007745	☐		944.00		
Accessories for three axis stage:						
Additional pair of hemispheres, n = 1.62	M007752	☐		53.75		
Additional pair of hemispheres, n = 1.70	M007753	☐		53.75		
Interchangeable central plate which can be heated by water circulation, and a special lower hemisphere for use therewith (n = 1.54)	M007754	☐		80.75		
Additional lower hemisphere for M007754, n = 1.62	M007755	☐		22.50		

		Price	Number Required	Total
Additional lower hemisphere for M007754, n = 1.70	M007756 ☐	\$ 22.50		
Iris unit for inserting above objective	M007757 ☐	26.75		
Stereographic net, 20 cm. diameter, on wood base, arranged for rotation under tracing paper	M007758 ☐	39.75		
As M007758 but printed on separate paper sheet	M007772 ☐	.25		
Equal area net, 20 cm. diameter, printed on paper	M007773 ☐	.25		
Extra for alternative bridge for upper hemi- sphere, incorporating a parallel guide, suit- ably graduated	M007765 ☐	110.75		
3× objective, N.A. 0.1 (0.15 with hemi- spheres)	M022013 ☐	18.00		
20× objective, N.A. 0.25 (0.38 with hemi- spheres)	M007817 ☐	181.00		
Point or particle counter	M007530 ☐	663.25		
Counter unit alone, for use as a particle counter	M007531 ☐	403.25		
Visual microphotometer complete with 6 V., 6 W. lamp and transformer (for use with normal eyepiece tube)	M007550 ☐	374.00		
Visual microphotometer as above, but for use with wide eyepiece tube	M007551 ☐	392.00		
Spare bulb, photometric 6 V., 6 W., for microphotometer	M606456 ☐	1.75		
Stage micrometer, glass, 1 mm. divided into 100 parts	M001586 ☐	22.50		
As M001586 but scale ruled on metal	M001591 ☐	31.50		
Filar micrometer, with 10× eyepiece, travelling web reading against a mm. scale reading direct to 0.01 mm., for normal tube eyepieces	M011525 ☐	151.25		
As M011525 but for wide tube eyepieces	M011526 ☐	151.25		
Fitted wood cabinet for microscope	M720525 ☐	47.00		